

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 12, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 12 recite the limitations “a received version of a portion of a reference file” and “an original version of the portion of the reference file”, however, the specification does not appear to disclose these two limitations. Paragraphs 0022-23 and 0027-0028 teach an audio signal is being sent to the MTA from the testing dialer, testing function allow to save the audio signal in a packet and send the packet to the controller, which retrieve the audio signal for comparison with a reference file. Applicant also argues that claim 1 has been amended to include limitation similar to cancelled claim 7, however new entered limitations to claim 1 is a modified version to claim 7 that include new matters issues presented above.

3. Claim 22 recites “receiving a received version of the digital signal from the reference file”, the specification does not appear to disclose this limitation. Paragraphs 0022-23 and 0027-0028 teach an audio signal is being sent to the MTA from the testing

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dialer, testing function allow to save the audio signal in a packet and send the packet to the controller, which retrieve the audio signal for comparison with a reference file

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 12, and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 12 recite the limitation “to receive a received version of a portion of a reference file”, which vague and not clear what a received version , and where it is being received before the test function received this “received version”, is it received on a component, test dialer or controller ? Examiner will interpret the claim as best understood as set for the below.

6. Claim 22 recites “receiving a received version of the digital signal from the reference file”, which vague and not clear what a received version , and how it is being received from a reference file, if it is being compared to the reference file based on Paragraph 0022.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3, 5-6, 11-13 are rejected under 35 U.S.C. 102(e) as being unpatentable by Goodman (US 7,173,910).

Regarding claim 1, Goodman discloses, a system for measuring quality of a digital network (Fig. 2, el. 30) comprising:

a controller (the processor in the Probes; Goodman does not expressly disclose the processor, but it is inherent for the TP to have a processor in order to perform the mentioned functions i.e., run the software algorithm to test the voice quality; Pg. 3, lines 32-40 and Pg. 5, lines 34-36)

a test dialer (Fig. 2, el. 14f)

a network component (Fig. 2, el. 36) remote from said test dialer and said

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controller (Pg. 7, lines 12-22)

said network component being in communication with said controller and said test dialer over the digital network (Fig. 2, el. 12)

a testing function resident on said network component (Fig. 5, el. 82 and Pg. 9, lines 45-48)

said controller controlling said test dialer and said testing function to determine at least one quality (Pg. 10, lines 1-11) selected from the group consisting of a voice quality (Pg. 2, lines 16-20 and 42-47), a call completion quality, a load capability quality, and any combinations thereof.

Goodman discloses that the test probes “reads on test dialer” transmit and receive the reference voice files (Pg. 3, lines 52), the test probes store a software for voice listening quality PAMS “reads on test function also” (Pg.3, lines 29-35), when the first probes acts as a recourse to transmit the voice reference file, the second probes will receive the reference file, send it to the controller “the processor that run the PAMS algorithm” for analyzing and decide the quality (Pg. 3, lines 52 through Pg. 4, lines 1-14).

Regarding claim 2, Goodman discloses, said network component is selected from the group consisting of a multimedia terminal adapter (Fig. 5, el. 74 and Pg. 9, lines 38-44), a fiber node, an amplifier, a tap, and any combinations thereof.

Regarding claim 3, Goodman discloses, said network component is a multimedia

terminal adapter positioned at a point-of-service (Fig. 2, el. 74 and Pg. 9, lines 38-44)

Regarding claim 5, Goodman discloses, said multimedia terminal adapter is an embedded adapter or a stand-alone adapter (Pg. 9, lines 39-44).

Regarding claim 6, Goodman discloses, said testing function is configured to receive a call set up signal from said test dialer (Pg. 10, lines 6-13).

Regarding claim 11, Goodman discloses, said at least one quality comprises a voice quality selected from the group consisting of a Mean Opinion Score (MOS), a Perceptual Analysis / Measurement System PAMS (Pg. 3, lines 35-36), a Perceptual Speech Quality Measurement PSQM (Pg. 3, lines 37-38), a Perceptual Evaluation of Speech Quality (PESQ) and any combinations thereof.

Regarding claim 12, Goodman discloses, a system for measuring quality on a digital network (Fig. 2, el. 30) comprising:

a controller (the processor in the Probes; Goodman does not expressly disclose the processor, but it is inherent for the TP to have a processor in order to perform the mentioned functions i.e., run the software algorithm to test the voice quality; Pg. 3, lines 32-40 and Pg. 5, lines 34-36)

a multimedia terminal adapter positioned at a point-of-service (Fig. 1, el. 14b)

a testing function resident on said multimedia terminal adapter (Pg. 3, lines 34-36; PAMS)

a test dialer (the test probes dial a phone number for the purpose of testing; Pg. 3, lines 57-59 and Fig. 1, el. 14a)

said controller, said multimedia terminal adapter, and said test dialer being in communication over the digital network (Fig. 2, el. 12) so that said testing function can receive one or more non-invasive test signals from said test dialer (Pg. 3, lines 52-66; regarding non-invasive signal, Goodman reference meet this limitation because the test signal does not cause any harm to the human being).

Goodman discloses that the test probes “reads on test dialer” transmit and receive the reference voice files (Pg. 3, lines 52), the test probes store a software for voice listening quality PAMS “reads on test function also” (Pg.3, lines 29-35), when the first probes (reads on test dialer) acts as a recourse to transmit the voice reference file, the second probes (reads on multi media adaptor) will receive the reference file, send it to the controller “the processor that run the PAMS algorithm” for analyzing and decide the quality (Pg. 3, lines 52 through Pg. 4, lines 1-14).

Regarding claim 13, Goodman discloses, said one or more non-invasive test signals comprises at least one signal selected from the group consisting of a call set up signal (Pg. 3, lines 57-58), a load test signal, and any combinations thereof.

Regarding claim 19, Goodman discloses, said at least non-invasive test signal further comprises a call set up signal (Pg. 3, lines 57-58)

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 7,173,910) in view of Sherlock (US 6,996,068).

Regarding claim 22, Goodman discloses, a method for measuring quality on a digital network, comprising:

sending a digital signals representing audio from a reference file (Pg. 3, lines 33-34) across the digital network (Fig. 2, el. 12) from a test dialer (Fig. 5, el. 72) to point-of-service equipment (Fig. 5, el. 76) having a testing function resident thereon (Fig. 5, el. 82)

receiving a received version of the digital signals from the reference file at said point-of-service equipment (Fig. 5; both way arrows indicate that the test file could be transfer to the point of service).

Goodman does not explicitly teach calculate at a location other than said point-of service equipment a voice quality.

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Sherlock discloses a testing system, wherein the testing is being done in a part of the network other than the point of service (Col. 4, lines 6-25).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made to modify Goodman with Sherlock in order to perform the testing in location other than point of service which will reduce the cost of these points of service.

Regarding claim 24, Goodman discloses, said test audio signal is non-invasive to said point-of-service equipment (Goodman reference meet this limitation because the test signal does not cause any harm to the human being).

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 7,173,910).

Regarding claim 4, Goodman discloses, testing function is configured to determine said at least one quality (Pg. 9, lines 45-47).

Goodman does not disclose that testing occurs without outputting an output signal at said point of service.

Official notice is taken that it is well known in the art, that during testing of the remote devices (in user location), the test signal is not noticed by the user at the remote location for the purpose of not disturbing the customer during the testing period.

Therefore, it would have been obvious to one with ordinary skills in the art, at the time the invention was made to modify Goodman system so it will not have an output signal



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(i.e., testing signal as audio/tone) at the customer location so not to disturb the customer.

13. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable Goodman US (7,173,910) in view of Demakakos US (6,891,851)

Regarding claim 17, Goodman discloses, said multimedia terminal adaptor receiving said non-invasive test signal

Goodman does not disclose first channel for receiving the said non-invasive test signal.

Demakakos discloses, using an out-of-band channel for send/receive a testing Signal (Pg. 4, lines 29-43)

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made to modify Goodman system to have the testing signal being on a separate channel, as suggested by Dimakakos, in order to avoid interruption.

Regarding claim 18, Goodman in view of Dimakakos discloses, said multimedia terminal adapter has a separate channel for sending and/or receiving a normal signal while said first channel is in use (Dimakakos: Pg. 4, lines 29-43).

14. Claim 29, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 7, 173910) in view of Ivanic (US 20040059572).

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Regarding claim 29, Goodman discloses, that the test probes “reads on test dialer” transmit and receive the reference voice files (Pg. 3, lines 52), the test probes store a software for voice listening quality PAMS “reads on test function also” (Pg.3, lines 29-35), when the first probes acts as a recourses to transmit the voice reference file, the second probes will receive the reference file, send it to the controller “the processor that run the PAMS algorithm” for analyzing and decide the quality (Pg. 3, lines 52 through Pg. 4, lines 1-14). Good man does not explicitly teach that the testing may be accomplish when the network component is no longer conducting a telephone call.

Ivanic discloses a method for measuring the quality of the network, wherein the testing is being performed prior to call being establishes (Paragraph 0012).

Therefore, it would have been obvious to one with ordinary skill in the art, to modify Goodman with Ivanic teaching so to ensure better quality for user when he conduct a call.

Regarding claim 31, Goodman discloses that the testing of the quality is being performed in a VOIP network.

Goodman does not explicitly teach a reliable transmission protocol.

Ivanic discloses, a reliable transmission protocol in a quality measurement method (Ivanic: Paragraph 0021).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made to modify Goodman with Ivanic teaching to use a reliable protocol in order to enhance the reliability of the network.

Regarding claim 32, Goodman in view of Ivanic discloses, TCP protocol (Ivanic: Paragraph 0021).

Regarding claim 33, see claim 31.

Regarding claim 34, see claim 32.

15. Claim 30 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman (US 7,173,910) in view of Sherlock (US 6,996,068) and further in view of Ivanic (US 2004/005,9572).

Regarding claim 30, Goodman in view of Sherlock discloses, sending the audio signal from point of service to a location other than the point of service (see claim 22). Goodman in view of Sherlock, does not teach that testing is being done when the point of service equipment is no longer conducting a telephone call. Ivanic discloses a method for measuring the quality of the network, wherein the testing is being performed prior to call being establishes (Paragraph 0012).

Therefore, it would have been obvious to one with ordinary skill in the art, to modify Goodman with Ivanic teaching so to ensure better quality for user when he conduct a call.

Regarding claim 35, see claim 22; regarding the limitation "using a reliable transmission protocol", Goodman discloses that the testing of the quality is being performed in a VOIP network.

Goodman does not explicitly teach a reliable transmission protocol.

Ivanic discloses, a reliable transmission protocol in a quality measurement method

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(Ivanic: Paragraph 0021).

Therefore, it would have been obvious to one with ordinary skill in the art, at the time the invention was made to modify Goodman with Ivanic teaching to use a reliable protocol in order to enhance the reliability of the network.

Regarding claim 36, Goodman in view of Sherlock and further in view of Ivanic discloses a TCP protocol (Ivanic: Paragraph 0021).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA EL-ZOOBI whose telephone number is (571)270-3434. The examiner can normally be reached on Monday-Friday (8AM-5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, curtis Kuntz can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/M. E./

Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614